

REMARKS

Claims 1-16 have been amended. Claims 1-16 remain.

Examination on the merits is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1.(amended) A sensor, comprising:

a signal source (3) ~~to that~~ emits a physical signal;

~~and comprising~~ a signal detector (4) at a distance from the signal source (3) to receive the physical signal; ~~at the location of the signal detector, and comprising~~

an evaluation unit (5) which is connected to the signal detector (4) and so as to evaluate the received physical signal ~~and to determine~~ the relative distance between the signal source (3) and the signal detector (4), wherein ~~such that~~ the signal source (3) and the signal detector (4) are situated ~~on a common substrate body (1) or on two separate substrate bodies (1, 2);~~

~~, characterized in that~~ a control unit (7) is connected to the signal source (3), the signal detector (4), and/or the evaluation unit (5), wherein the signal source, signal detector and the evaluation unit ~~that these units individually or in arbitrary combination can~~ each be individually be turned on and off ~~in a specific way by the control unit 7.~~

2.(amended) The sensor of Claim 1, wherein the evaluation unit includes a memory device having characteristic information indicative of the signal source. ~~characterized in that the evaluation is performed by means of stored information regarding the signal source (3).~~

3.(amended) The sensor of Claim 1 or 2, wherein ~~characterized in that~~ the spatial distance between the signal source (3) and the signal detector (4) is constant, and ~~that the transmission~~

properties of the transmission channel between the signal source (3) and the signal detector (4) are variable.

4.(amended) The sensor of ~~claim 1 or 2~~, wherein characterized in that the spatial distance between the signal source (3) and the signal detector (4) is variable, and that the transmission properties of the transmission channel between the signal source (3) and the signal detector (4) are constant.

5.(amended) The sensor of ~~claim 3~~, wherein characterized in that the evaluation unit (5) is configured and arranged such ~~designed in such a way that~~ the gas density or the transport rate or the throughflow quantity can be determined from the relative distance.

6.(amended) The sensor of ~~claim 4~~, wherein characterized in that the evaluation unit (5) is configured and arranged such ~~designed so that the acceleration, the pressure, or the force acting on~~ the sensor can be determined from the relative distance.

7.(amended) The sensor of claim 6, wherein one of the preceding claims, characterized in that the control unit (7) is connected to the signal source (3) and controls it, and that the evaluation unit (5) is connected to the control unit (7) in such a way that by means of the control data received from the control unit (7), the information regarding the signal source (3) can be updated with control data received from the control unit.

8.(amended) The sensor of claim 1, wherein one of the preceding claims, characterized in that the evaluation unit (5) and/or the control unit (7) is integrated into at least one of the substrate bodies (1, 2).

9.(amended) The sensor of claim 8, wherein characterized in that the evaluation unit (5) is situated in the substrate body (2) directly adjoining the signal detector (4).

10.(amended) The sensor of claim 8 or 9, wherein characterized in that the evaluation unit (5) is integrated into the second substrate body (2) and the control unit (7) is integrated into the first substrate body (1).

11.(amended) The sensor of one of the preceding claims 8 through 10, characterized in that wherein the evaluation unit (5) includes means for and/or the control unit (7) have elements to amplifying the signal.

12.(amended) The sensor of claim 3, wherein characterized in that the first substrate body (1), in which the signal source (3) is situated, and/or a region of the second substrate body (2), in which the signal detector (4) is situated includes , is designed as a diaphragm.

13.(amended) The sensor of claim 12, further comprising characterized in that a damping device to damp the diaphragm is present.

14.(amended) The sensor of claim 1, wherein the signal detector is sub-divided into a plurality of detector elements sufficient to provide a measure of ~~one of the preceding claims~~, characterized in that the signal source (3) and/or the signal detector (4) has a spatial structure apt to measure spatial resolution.

15.(amended) The sensor of claim 14, wherein said evaluation unit includes means for ~~characterized in that it has an electronic arrangement to processing~~ the spatially resolved measurement.

16.(amended) The sensor of claim 15, wherein ~~one of the preceding claims, characterized in that~~ part of the conductor tracks are situated in the respective substrate is used to form the signal source (3) and/or to form the signal detector (4).